Use the labor-leisure model to answer these questions. You should draw the budget constraints but you do not need to show the indifference curves. Assume leisure is a normal good.

Assume an ISU graduate has $\bar{Y}$ nonlabor income and can earn a wage $W_1$ after graduating from college.

Under the Federal Direct Student Loan Payment, borrowers now have the option of choosing the Income Contingent Repayment (ICR) Plan: http://www.ed.gov/offices/OSFAP/DirectLoan/RepayCalc/dlindex2.html
Under ICR, graduates repay their loans as a proportion $t$ of their labor income. The previous loan arrangement required that graduates pay a fixed amount $F$ per year to repay the loan.

a. In Figure 1, Draw the ISU graduate’s budget constrain with a wage of $W_1$, and nonlabor income of $\bar{Y}$, assuming the graduate has no loans to repay.

b. Show in Figure 1 how the ICR scheme alters the budget constraint of the ISU graduate relative to the budget constraint with no loan repayment. What are the income and/or substitution effects of the ICR program?

c. In Figure 2, redraw the “no loan” budget constraint. Show in Figure 2 how the traditional loan arrangement that involves a fixed payment of $F$ per year alters the graduate’s budget constraint relative to the no loan repayment case. What are the income and/or substitution effects of the traditional loan repayment?

d. In which scheme are work incentives stronger?

e. The Congressional Research Service estimated that the default rate on ICR loans was 25 percent higher than on traditional repayment plans. Why?